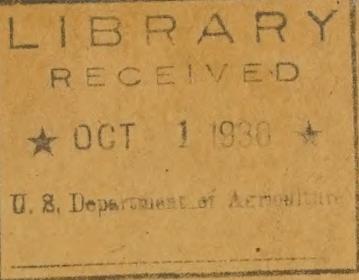


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AGRICULTURAL MUSEUMS

BY

F. LAMSON - SCRIBNER

MAY 1921.

Read at the Cleveland
Meeting of the American
Association of Museums
May 26, 1921.

A-G-R-I-C-U-L-T-U-R-A-L M-U-S-E-U-M-S

By

F. Lamson-Scribner,
Expert on Exhibits U. S. Department of Agriculture.

Read at the Cleveland Meeting of the American Association
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(Illustrated by stereopticon.)

The purpose of this paper is to invite attention to the subject of agricultural museums, their aims and possibilities, and to briefly describe those new active or deserving notice because interesting historically. There is a growing demand for museums of agriculture frequently heard in the Department at Washington and through the various agricultural organizations of the country. The field is an open one and the presentation of the subject seems timely.

Aims

The aim of an agricultural museum is to assemble and preserve collective exhibits for reference and public display of such products and articles as shall furnish reliable and practical information on agricultural subjects to all engaged in agricultural pursuits or in any way interested in such matters.

These purposes are accomplished by the proper display of its collections, by lectures, demonstrations, publications, exchanges with similar institutions and by cooperation with individuals, public or private organizations in the improvement of agricultural practices and development of our agricultural resources.

Broadly speaking, the purpose of the museum is to raise intellectual standards and improve social conditions in our agrarian communities and promote the interests of one of the most important branches

of the country's commonwealth.

The agricultural museum overlaps nearly all others because of the wide range of its subjects drawn from every department of science and art, materials that form the basis of all national prosperity and wealth. Its collections interest directly the farmer and fruit-grower, the dairyman and stockbreeder, in fact all who have to do with agricultural products whether from the mineral, vegetable or animal kingdoms, and indirectly they interest all mankind.

Active Museums

The world's museums of agriculture are the National Agricultural Museum at Berlin, the Royal Hungarian Museum of Agriculture at Budapest and the Agricultural Museum of the Rural Society of Argentina at Buenos Aires.* These institutions are strictly agricultural in character and aside from the general interest attached to their collections it seems desirable because they are so few, to present here a brief account of them as a matter of record.

The National Agricultural Museum at Berlin

The National Agricultural Museum at Berlin, also known as the Museum of the Agricultural High School, with which it is connected, was opened in temporary quarters April 4, 1868. The collections, many of which were obtained from the World's Fair at Vienna in 1873, and the Agricultural Fair at Bremen in 1874, were installed in the building they now occupy in 1880. This building, located on Invalidenstrasse, is 72 meters long by 55 meters deep, and three stories high. The first two floors are occupied by the museum while on the third are class and work rooms and the library.

* Because of insufficient data the agricultural museums at Lyngby, Denmark, and Petrograd Russia are not included. —

Collections

Agricultural machinery occupies a large part of the ground or first floor. There are many models as well as actual machines in full size. The evolution of the harvester and the development of the plow from the earliest periods to the present time are fully shown. Here also are the interesting zoological collections embracing the osteology of our domestic animals, and systematic zoology with special reference to animals and birds, in their relation to agriculture.

The principal collections on the second floor are the models of horses and cattle, of farm buildings, zootechnics, vegetable products, plant pathology, economically important minerals, agricultural soils, fertilizers, etc.

The Royal Hungarian Agricultural Museum.

The Royal Hungarian Agricultural Museum was founded in 1896 for the immediate purpose of preserving the extensive and valuable agricultural ^{National} collections made for the Millennial Exposition. The present museum buildings, one of the Renaissance and the other of the Gothic type of architecture, were completed in 1904, at a cost of \$480,000. (2,400,000 crowns,) and opened to the public in 1907. They are very picturesquely located on the island of Czechenyi at Budapest.*

Collections

The collections occupying the two floors of the Renaissance building cover nearly the entire field of agriculture from agrogeology, agricultural botany, and agronomy, to animal husbandry, zootechnics, and agricultural machinery. A large series of wheat samples, in the collection of cereals, gathered from every part of the country for many successive

* There is a smaller third building in which are the administrative offices and lecture hall. This building is Romanesque and illustrates the historical Romanesque buildings in Hungary.

in being set to the right a portion *Trichia formidans*
 from the collection of Dr. J. C. Greenman given in 1860, 1861, 1862
 with 16 individuals, all less than one-half to one-half inch
 long, were found to have the following measurements:
 Two to eighteen millimeters, and smaller individuals, with
 wings at maturity, from half a cent to three-eighths of an inch.
 The following table gives the measurements of the
 antennae, mandibles, maxilla, and palps, including width of
 wings at maturity, from which it will be seen that the
 maximum width of the wings is about one-half of an
 inch, and the antennae, mandibles, maxilla, and palps are
 proportionately larger than the wings.

1860-1870

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years, illustrates changes which have taken place in the varieties during the period covered, or in the amounts produced on different soils or under varying seasonal conditions from year to year. A feature exhibit is the State farm stables showing the entire equipment of a first class breeding establishment. In the collections are a number of famous statues of horses, besides models and oil paintings of the standard breeds of cattle. There is manifest in all the collections an intent to make agriculture attractive as a profession as well as to promote intelligence and diffuse information on agricultural subjects.

The floor plan is rectangular and the arrangement of the different divisions in the various rooms and corridors has been carried out with much care and with pleasing effect.

The Gothic building, close by, contains the collections of forestry, fish and game. The forestry exhibit includes forest products, cultural forests, forest management, the insects and diseases affecting forest trees, and other subjects connected with the science of forestry. On the second floor are collections illustrating the chase, and skilfully mounted specimens of animals and birds of prey found in Hungary, and aquaria of the food and game fishes of Hungarian waters. The library containing works on the chase and other sports is located here.

In addition to its permanent collections, ^{and general library} the museum is well equipped with periodicals and journals, and its educational activities include lectures, practical demonstrations, the study of Hungarian and foreign agricultural literature, and exchanges with similar institutions.

The museum has a commercial aspect to the extent that it demon-

strates forms of packing agricultural products desired by consumers; keeps in view the acquisition of new markets; systematically collects the addresses of merchants, and gathers full information regarding price lists, tariffs and customs' duties, etc.

Every effort has been made by the managers of the museum to keep it up to date and in line with the activities of the time, fully realizing the great importance to the country of the interests it represents.

The Agricultural Museum of the Argentine Rural Society.

The third and last of the world's great museums of Agriculture is the Agricultural Museum of the Argentine Rural Society, established to preserve the splendid collections made for the International Agricultural Exposition held at Buenos Aires in 1910 and to provide for a permanent display of the agricultural resources and products of the Republic, from Jujuy and Misiones to Terra del Fuego.

The museum building is of substantial and pleasing design and is located on the grounds of the Rural Society at the corner of Avineda Sarmiento and Calle Santa Fé overlooking Plaza Italia. It is 90 meters long by 26 meters wide and originally cost about \$100,000. The interior is like one immense, well lighted hall with a broad gallery which adds materially to the exhibit space. Across the Plaza are the Botanical Garden and Zoological Park.

Collections.

The collections, now exceeding 30,000 numbers, have been selected and installed with much care, are well classified, completely labeled and at once impress the visitor by the neatness of their appearance and their clearness of purpose. The collections of wheat and flaxseed

among the most important products of the country are very complete and are neatly installed on specially designed stands that are a unique feature in this museum. The forestry collections including over 750 kinds of woods have been prepared in a manner similar to that of the Jessup collection in the American Museum of Natural History. The labels contain a great deal of original and important information in regard to the distribution of the species and their value for domestic or commercial uses.

The collections and general activities of the museum are classified as follows; 1. Natural Products; 2. Animal Products; 3. Agricultural Products; 4. Products of Agricultural Industry; 5. Products of Animal Industry; 6. Agricultural Machinery; 7. Rural Engineering; 8. Congresses on Agricultural and Zootechnics; 9. Publications and Exchanges; 10. Direction and Administration.

The museum is under the management of the Directors of the Rural Society by which organization it is supported.

The collections have far outgrown the present accommodations and plans have been drawn for an additional building to take care of the Agricultural machinery and other new material.

A number of important Congresses have been held and the valuable results of these meetings appear in the twenty-two publications which the museum has issued.

The annual attendance of the museum which is open to the public two days each week exceeds 100,000, not including the 30,000 or more students from the schools of Buenos Aires. One of the projects *D. Agr. Carlos D. Signor* *The Director,* Girola has in view, is the preparation of educational collections to be sent out, upon request, to various institutions throughout the country for the use of teachers.

The success of this institution is due to the untiring efforts of the Director, Sig^r Girola. Without compensation and with no models for guidance, but with entire freedom from precedent and political control, Sig^r Girola has achieved a task of the greatest value and importance to his country and in a manner that commands only admiration, Argentina stands alone among the nations of the Western Hemisphere in the possession of a great and distinctly agricultural museum.

Museum of the United States Department of Agriculture.

As a matter of history in the establishment of museums, the museum of the United States Agricultural Department, that existed for a generation following its establishment in 1864, is interesting and worthy of record. The Agricultural Department was established by Congress July 1, 1862 and first Commissioner of Agriculture in his report to President Lincoln, dated January 1, 1863, pointed out the importance of a museum in the organization of the Department and the general nature of the collections which it should contain.* A curator for the museum, who was also the entomologist of the Department, was appointed in April 1863 and a systematic classification and registering of the donations was begun the following year. In 1868 the Agricultural Department building was completed and the museum collections were installed in a spacious hall one hundred feet long by fifty feet wide on the second floor of this building. At this time the private collections of the curator, accumulations of many years' labor, were purchased by the Government at a cost of \$10,000 and added to the museum.

* "The museum is not intended to be a mere collection of beautiful, unique or curious specimens, but a cabinet of reference emphatically deserving the name applied to it - "An Object Library, or Collection of Agricultural Facts" Reports of the Commissioner of Agriculture for 1867 and 1868.

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The floor plan shows the arrangement of the cases and in a general way the classification of the collections.

The museum received a large increase of material by donations from the valuable collections made for the Centennial Exposition held in Philadelphia in 1876, and provision was made to take care of these by the construction of a balcony along two sides of the museum hall. The exhibit cases in the balcony were somewhat smaller than those on the main floor, the latter being fourteen feet long by four feet deep and thirteen feet high, with solid dust-proof, ornate walnut frames.

The museum attained its greatest usefulness and importance during the few years immediately following the Centennial Exposition when the value of its collections was estimated at \$100,000.

The collections were still in the big hall on the second floor of the Department building which is now occupied by the office of the Secretary, when the speaker entered the service in 1885, and he well recalls the tall cases with their miscellaneous collections, particularly an interesting series of models of mushrooms and other fleshy fungi.

In 1887 the museum was moved to a temporary wooden structure which had been built to accommodate agricultural and mineral collections acquired from the first Atlanta Exposition, held in 1881. Some of the more important collections had already been transferred to the National Museum at this time and a few years later, 1898, when the museum was entirely abandoned, the objects regarded as valuable were either distributed to the scientific divisions of the Department or turned over to the National Museum where they now form a part of the economic collections of that institution.*

* A description of this museum and its collections was published in the Annual Report of the U.S. Department of Agriculture for 1877, pp. 118-148.

Such, in brief, is the record of the rise and fall of the museum of the National Agricultural Department. It appears that it was established four years before the establishment of the agricultural museum at Berlin, that fourteen years later it reached the zenith of its usefulness and that after a lapse of 34 years it ceased altogether and has long since been forgotten by many now living in Washington and the number is far greater who have never even heard of its existence.

Study Collections

The research or study collections of the Agricultural Department are of great value and in some lines quite extensive. There is the great National Herbarium, rich in plants of agricultural interest, unrivalled in fact in its grass collections, and plant pathology is astonishingly well represented. The entomological collections are particularly rich in economic species. There are large and valuable study collections of cereals including Indian corn, sorghums, rice, etc. Extensive collections of the agricultural soils of the country made in the soil survey work that is constantly going on. Seeds of all agricultural plants of this and many other countries. Wonderfully exact and beautiful reproductions in wax of our orchard fruits in great variety. Interesting and most instructive pathological specimens illustrating the diseases of the domestic animals, etc. These collections are kept in the offices of the bureaus conducting agricultural investigations or in the National Museum where they are taken care of by officials of the Agricultural Department serving the museum as honorary curators. They are all accessible to those carrying on original studies in the subjects which they cover and taken together constitute a very essential part of the equipment of a Museum of Agriculture.

General Considerations.

Much has been written about museums of Natural Science, of Fine Arts and of History. The pages of "Museum Work" are filled with interesting descriptions of these and other Museums - telling about their management and how they are broadening their fields of usefulness by encouraging in effective ways, a closer contact with the people. One searches in vain, however, for even a single line about Museums of Agriculture. Why have we no Agricultural Museums and why do we find so little said about them anywhere? Is it because Agriculture is so commonplace? Or is there a prejudice against the term because it savors too little of science and art? Perhaps it is because the Museum presentation of Agriculture has never been made attractive.

Whatever the reason may be, the fact remains that agriculture offers a field for museum activity unsurpassed by any other subject. It includes almost every line of human endeavor; touches the lives of all peoples and draws upon almost every department of science and art in the exercise of its functions. Certainly there is abundant material for such a museum.

We may go to the Museum of Natural History for our "wonder" exhibits, and, if need be, we can go to Museums for other materials. The Commercial and the Archeological Museums would each supply many things which, reset to teach lessons in Agriculture, could be added to our collections. The Museum of Comparative Anatomy would furnish subjects that would show relationship in our domestic animals and the types from which they sprung. From the Geological Museums could be obtained the rocks that have produced our Agricultural soils, and from the Museums of Art - well,

from the Museum of Art we could get those things that would make our museum beautiful - increasing its interest and greatly enhancing its value.

But we need not go to the museums for any of our collections. All out-doors is replete with agricultural subjects. Just common, every day subjects that we like because they are common and the more we see them the more we appreciate their value and importance; subjects interesting because of their relationship to each other or in the part they play in human affairs; and again subjects that will of themselves add beauty to our museum as they increase its value.

How many things there are for the artist with his palett and brush, or chisel and mallet! In the Agricultural Museum at Budapest is a magnificent painting by an artist of National fame, of two bulls in fierce combat. There is intense action in the picture and all stop to admire it. It is a most desirable agricultural exhibit and attracts people to the museum. There are other paintings on the walls of this museum and here and there are finely executed statues of famous horses and beautifully made models of all our farm animals. Such things suggest ways of making our museum most inviting to visitors. Do we not claim to have the finest breeds of horses, cattle and sheep in the world? Should we not have pictures or models of these with every pains taken to imbue them with life and action, either singly or in groups - wild horses on the prairie and great thoroughbreds in domestic surroundings.

Fine paintings may be used to illustrate great industries. Features could easily be introduced to make them attractive and give them a touch of human appeal. The beet sugar industry, for example, could be illustrated by a series of large pictures arranged around the wall of a

closed pavilion so there would be no distracting views. There was such a series shown at the "Exposition of Industry and Labor", held in Turin, Italy in 1911. In the center of the pavilion was a dais with seats from which the paintings were viewed. The various steps were shown, nearly life size, from the harvesting of the beets to the manufactured products. They were all striking and full of interest, but the one view that left the most vivid and lasting impression upon the visitor was that of an old peasant in his big two-wheeled cart with shaggy horses, wildly racing with his harvest load to shelter from before a sudden storm. There were minor figures in the scene - but the anxious, rugged face, straining animals, and dense, wind-driven clouds, all marvelously colored, gave a sense of action that was vivid in the extreme. This picture was not essential to the portraying of the industry, but its introduction was most happy and added interest and force to the exhibit.

Portraits of men distinguished for what they have done of lasting benefit to the agricultural industries of the country, should have place upon the walls of the museum, Senator Morrell, father of the Agricultural College Land Grant Act; Congressman Hatch, who made possible the establishment of the Federal State Experiment Stations, are examples; and one may think of great inventors, who have lightened the farmer's burden or enlarged his field of usefulness by their ingenuity and skill.

Turning to the world about us - everywhere there is abundance of material that is attractive or may be made so. Look over the cotton plantations of the South. How many, many interesting subjects the view suggests! Would we had time to enumerate them all. The varied farm life in New England. How inviting, how diversified are the interests! What a charming collecting field for our museum! Past endeavors, present achievements

and ideals for the future mingle here in intensely interesting ways. The great corn fields of Illinois and Iowa; the endless stretch of wheat fields over the prairies of the Dakotas; the apple orchards of Washington and Oregon; the vineyards, the olive orchards and orange groves of California; the tobacco lands of Kentucky and other States, are but examples of choice collecting grounds, replete with good things, which if properly presented by those skilled in the art of museum making for visual instruction, would afford a perpetual source of delight and interest and a fountain of information unsurpassed in its bounty.

In a museum of agriculture it is preeminently important to provide for the display of fresh fruits, flowers and vegetables; for loan exhibits and for the frequent changes of material necessary to meet changes in agricultural methods and practices. If the museum can provide for a chrysanthemum show or an exhibit of apples in their season, visitors will take an added interest in the institution and many who come to see the flowers or fruit will discover and carry home some of the useful and important lessons which its permanent collections teach.

A few years ago Mr. Arthur C. Parke, in discussing "Habitat Groups in Wax and Plaster" before this Association, told us how our subjects may be interpreted in terms of natural environment so that we may look out upon the scene with all its realistic effects, as through a window. In the habitat group he says "we find the most effective method of illustrating and of teaching the public." These groups are fast becoming the prevailing feature of Museums of Natural History and are rapidly changing indifference on the part of the public to eager and delighted interest. Agricultural subjects are well adapted to presentation by this method, its application being limited, as has been said elsewhere, only by funds, the

imagination, the Specialists's knowledge and space within the museum walls.

Homestead scenes typical of different sections of the United States, each so developed as to bring out those things that call to mind sweet memories of home life, are inspiring subjects for the application of these groupings. The opportunity is afforded to introduce little lessons in rural Architecture, home adornment, landscape effects, pleasing arrangement of buildings, and of the fields or woodlands that stretch away in the background, and many other things that help to educate and refine. Let nothing be overdrawn or exaggerated, but select things from real life - the best there is - to inspire in the minds of visitors the desire and ambition to be the possessors of just such a home. Realistic examples are before him for contemplation and selection. Orchard scenes and scenes of the great western grain fields in which the fore-grounds teem with life and activity, while extending far into the distance are thousands upon thousands of acres of golden grain or endless rows of fruit trees, are other suggestions that fill the mind with visions of wondrous possibilities in picture making.

Such subjects may be multiplied indefinitely. They are too numerous to be more than suggested, but we may think of the grand opportunities which the wide range of the field affords for the development of actual scenes in a museum of agricultural science, every one carrying some lesson of value in the most effective and most pleasing way the museum worker has yet devised.

There is no phase or problem in museum art that has not its application in the building up and maintenance of a museum of agriculture from the foundation plans and installation of the simplest objects to the thoughtful development and construction of the most elaborate habitat groups, where realism and imagination work hand in hand with truth.

The establishment of an educational museum devoted strictly to agriculture opens practically a new and untried field in museum making in this country. The functions of such a museum are not only to make and preserve collections that shall interest and instruct, but also to make agriculture attractive as a profession. It must not only encourage but also lead in those measures that shall secure to our agrarian communities their full share of happiness and contentment. Its establishment opens for us a new field in museum making, but the time has arrived when the subject should be given the fullest consideration. A sentiment favorable to museums of all kinds is rapidly developing and the demands of the public are becoming more and more insistent for methods of visual instruction and entertainment so that "he who runs may read" and enjoy.

Our agricultural museum is neither commonplace nor lacking in elements of science, while its collections are filled with potentialities eloquent with beauty. In our visions it ranks with the greatest and most exalted endeavors designed to educate the people and advance the standards of civilization. Its advent will mark the fulfilment of long cherished dreams and the achievement of ideals where science and art shall chant in unison the songs of Ceres to all mankind in a great American Museum of Agriculture.

(Stamp of Local Board)		Serial No.	Name of Registrant:		Telephone No.						
			(First name.)	(Middle name.)	(Last name.)						
		Order No.	Address		(No.)	(Street or R. F. D. number.)					
			(City or town.)		(County.)						
					(State.)						
		UNDER JURISDICTION OF LOCAL BOARD			UNDER JURISDICTION OF DISTRICT BOARD						
		(Enter letters showing divisions claimed or found in squares showing class claimed or found.)									
Classification claimed by registrant		I	II	III	IV	V	I	II	III	IV	V
Classification claimed by another person		I	II	III	IV	V	I	II	III	IV	V
Classification by Local or District Board		I	II	III	IV	V	I	II	III	IV	V
Vote of board on most deferred classification found		Ayes			Noes		Ayes			Noes	
Classification on appeal		I	II	III	IV	V	I	II	III	IV	V
1. Questionnaire mailed	2. Questionnaire returned					3. Time extended to					
4. Classification posted	5. Record forwarded to District Board					6. Record returned by District Board reclassification posted					
7. Record forwarded to President	8. Ordered to report for physical examination					9. Report of examining physician					
10. Report of medical advisory board	11. Action of Local Board on physical examination					12. Physical examination forwarded by District Board on appeal					
13. Action of District Board on appeal	14. Physical examination record returned by District Board					15. Date ordered to report for					
16. Reported for entrainment	17. Date of entrainment					16. Date of apprehension					
19. Reported to adjutant general of State as delinquent	20. Reported to Adjutant General of Army as deserter					17. Discharged at mobilization					
22. Date received at mobilization camp	23. Transferred to Local Board for					18. Accepted					
		RECLASSIFICATION									
Date	By whom reclassified	I	II	III	IV	V	Vote of Board		Signature of official		
							Ayes	Noes			

